



# Product Specifications: Acousta-Wal®

## <u>PART I – GENERAL</u>

## SUBMITTAL

Submit product literature, certifications, test reports and full size sample(s).

## QUALITY ASSURANCE

All glazed sound-absorbing masonry units shall be Acousta-Wal<sup>®</sup> units produced with special mold parts available from manufacturer. Units shall be manufactured to meet ASTM C90, latest revision. Production shall be monitored so that the top of the units shall be completely closed and edges of slots and ends of blocks shall be straight and clean. Type IV units shall have fillers as supplied by Trenwyth<sup>®</sup> manufacturers, inserted in the cavities at the block plant. Type IV fillers shall be fiberglass fillers laminated to metal septa. All filler material shall be cut accurately to size and installed as recommended for the type of Acousta-Wal<sup>®</sup> units specified. All units contain manufacturer-approved integral water repellent CMU admixture at the time of manufacture.

Astra-Glaze-SW+\*/Acousta-Wal\* and Verastone/Acousta-Wal\* units are available with pre-consumer recycled content. Contact your Trenwyth representative for details.

Fire Resistance: Define hourly ratings by NCMA TEK Notes, available at EchelonMasonry.com or Table 722.3.2 of the 2012 International Building Code.

Field Constructed Mock-ups: Construct a sample panel, no less than 4' x 4', of units of each color and size to be used in the project.

Manufacturer requires ordering a full size unit to illustrate color and texture for approval. Manufacturer requires that a jobsite sample panel be installed at the jobsite prior to installation of any Trenwyth products. This panel will represent both the quality of the product and the workmanship to be expected for the project. The panel must be approved by either the owner or architect for the project. Manufacturer will provide 4" units for a 4' by 4' sample panel at no cost for the material (excluding freight to site).

## DELIVERY, STORAGE AND HANDLING

Acousta-Wal<sup>\*</sup> units shall be delivered to the jobsite on covered banded pallets with cardboard between layers. Store pallets in single-stacks on level ground and cover with waterproof covering (e.g., tarpaulins) to protect the blocks from inclement weather. Handle blocks carefully to avoid breakage and damage to the finished surfaces.

#### **PROJECT/SITE CONDITIONS**

Protection of Work: Cover walls each day after installation to

keep open walls protected and dry.

## PART II- PRODUCTS

#### PRODUCT NAME

ACOUSTA-WAL<sup>®</sup> sound absorbing concrete masonry units. Finishes include:

- Astra-Glaze-SW+<sup>®</sup>/Acousta-Wal<sup>®</sup> glazed sound-absorbing concrete masonry units<sup>\*</sup>
- Verastone<sup>®</sup>/Acousta-Wal<sup>®</sup> recycled ground face soundabsorbing concrete masonry units<sup>\*</sup>
- Trendstone<sup>®</sup>/Acousta-Wal<sup>®</sup> ground face sound-absorbing concrete masonry units
- Gray block/Acousta-Wal<sup>®</sup> sound-absorbing concrete masonry units

\* Available with recycled content.

#### MANUFACTURER

Anchor Concrete Products (800) 233-1924 Church Road • Emigsville, PA 17318

Northfield Block Company (800) 358-3003 3400 East Bungalow Road • Morris, IL 60450

Superlite Block (800) 331-9823 4626 N. 42nd Avenue • Phoenix, AZ 85019

#### RELATED MATERIALS

Colored matching or contrasting mortar is available from the manufacturer. Consult NCMA TEK Notes, available at EchelonMasonry.com, for mortar type and specifications. For all exterior mortar, use matching manufacturer approved water repellent mortar additive, following manufacturer's instructions. Consult manufacturer for recommendations.

#### SIZES AND SHAPES

Acousta-Wal surfaces are manufactured to provide finished dimensions of 7 5/8" x 15 5/8"  $\pm$  1/8". Bed depth dimensions for single face units are 3 9/16", 5 9/16", 7 9/16", 11 9/16"  $\pm$  1/8". Two face units are 3 1/2", 5 1/2", 7 1/2", 11 1/2"  $\pm$  1/8". Please contact plant for size availability.

## PART III - EXECUTION

#### LAYING MASONRY WALLS

Draw blocks from more than one pallet at a time during installation. All exterior mortar shall include a manufacturer approved water repellent additive added to each batch in the appropriate dosage rates for mortar type (M, S or N) per manufacturer's instructions. Refer to NCMA TEK Notes, available at EchelonMasonry.com, for hot and cold weather construction practices, or TMS 602-11, Section 1.8C or 1.8D.





Acousta-Wal<sup>®</sup> units shall be installed by the general contractor or masonry contractor. Installation of Acousta-Wal<sup>®</sup> blocks shall be consistent with the best concrete masonry practices. Only quality units shall be used.

Acousta-Wal<sup>\*</sup> blocks shall be laid in running bond or stack bond as specified with the **closed tops up**. They shall be laid in a full horizontal bed of mortar. The slots shall face toward the room or area where sound absorption is required as shown on the plans. Slots shall be kept free of mortar and debris and the exposed mortar at the bottom of each slot shall be neatly tooled. **NO RAKE JOINTS**.

#### INSTALLATION

Lighting: Provide adequate lighting for masonry work by placing lighting at a reasonable distance from the wall for even illumination. Do not use trough lighting.

Cutting: Make all unit cuts, including those for bonding, holes, boxes, etc., with motor-driven masonry saws using either an abrasive or diamond blade. Cut neatly and locate for best appearance.

#### MORTAR BEDDING AND JOINTING

In all exterior mortar, we recommend using an approved water repellent additive (which may be purchased from manufacturer), following manufacturer's instructions. Consult manufacturer for recommendations.

#### FLASHING OF MASONRY WORK

Install flashing at locations shown in the plans and in strict accordance with the details and the best masonry flashing practices.

#### WEEP HOLES AND VENTS

Install weep holes and vents at proper intervals at courses above grade and at any water stops over windows, doors and beams. Consult NCMA TEK Notes, available at EchelonMasonry.com, for proper flashing and drawings.

#### INSPECTION

The glazed faces shall conform to the requirements of ASTM C744, latest revision, when viewed from a distance of 5 feet at right angles to the wall with diffused lighting. The concrete masonry units on which the glaze is molded shall conform to the requirements of ASTM C90.

The ground and gray block faces shall conform to the requirements of ASTM C90 when viewed from a distance of 20 feet at right angles to the wall with normal lighting.

#### INSTALLATION RECOMMENDATIONS

The unslotted side of Astra-Glaze-SW+\*/Acousta-Wal\* blocks must be painted or parged to seal the porosity of the aggregates. The units must be laid in a full horizontal bed of mortar and laid with the **closed tops up**. The slots should face toward the noise source. Slots must be kept free of mortar. The exposed mortar at the bottom of each slot should be neatly tooled and all debris removed. **NO RAKE JOINTS.** 

Under no circumstances should the units be laid upside down; that is, with the **closed tops down**. First, it would be impossible to lay the units in a full horizontal bed of mortar if they are laid upside down. Second, excess mortar would fall into the slots giving an unsightly appearance. If the cavity volume were reduced by more than 5 to 10% due to mortar falling inside, the acoustical performance of the units would be altered.

All Trenwyth concrete masonry units are manufactured with an integral water repellent. The admixture is mixed through the block at time of manufacturing and lasts for the life of the product. Mortar must also be treated at the time of installation.